NEW SPECIES AND NEW COMBINATIONS IN MEXICAN ASTERACEAE (HELIANTHELLA, SABAZIA AND VERBESINA)

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Preparation of a treatment of the Asteraceae for Mexico has prompted the following new species and combinations:

HELIANTHELLA DURANGENSIS B. Turner, sp. nov. Fig. 1.

H. ciliata S.F. Blake arcte similis sed habitu robustiore, foliis majorioribus 3-nervatibus ad super basim et acheniis majorioribus epapposis differt.

Perennial herbs 30-35 cm high. Stems somewhat recumbent below, sparsely appressed pubescent. Leaves opposite on the lower portions of stem, alternate above, gradually reduced upwards, the mid-stem leaves mostly 4-6 cm long, 10-15 mm wide, internodes mostly 3-5 cm long; petioles 0-1 mm long; blades ovate-lanceolate to oblanceolate, 3-nervate from well above the base (8-12 mm), glabrous to very sparsely strigose, except for the prominently incurved-strigose margins with hairs mostly ca 0.8 mm long. Heads 3.5-5.5 cm wide across the expanded rays. Involucres 2-3 seriate, the outer bracts foliaceous, 10-20 mm long, ciliate. Receptacular bracts, those of the outer series, mostly truncate and glabrous apically, without pubescent appendages. Ray florest ca 11, neuter, the ligules 15-20 mm long, 8-12 mm wide. Disk florets numerous, the corollas 3.5-4.5 mm long, the tubes ca 1 mm long, the limbs tubular, 2.5-3.5 mm long, mostly purplish, glabrous, except for the moderately pubescent lobes. Achenes obovate, ca 8 mm long, ca 5 mm wide, appressed silky-pubescent with hairs 1 mm long or less, epappose.

TYPE: MEXICO.DURANGO: Meadows in pine forest along highway 40, E of El Salto, 2 Sep 1969, Clarke & Jones 690902-99 (holotype UCR).

In Weber's (1952) treatment of Helianthella this taxon would key to H. ciliata, which is known from only a few collections from about Chihuahua City, Chi. The present taxon differs in being more robust, with larger leaves which are 3-nerved from well above the base and larger heads with outer involucral bracts broad and foliaceous, the apices truncate and without obtuse, markedly pubescent, appendages. In addition the achenes are epappose with longer, appressed-silky, short hairs. Blake described H. ciliata as possessing 3-4 pappus sqamallae, these deeply laciniate-ciliate, connate at the base, and 1.0-1.3 mm long. The present species might be said to have a similar "pappus" but the connation would be imaginary at best and the "laciniations" 0.1-0.5 mm deep.

VERBESINA JACKSONII B. Turner, sp. nov.

V. callilepis S.F. Blake arcte similis sed foliis plerumque alternatis et basalibus laminis plerumque lanceolati-ellipticis venatione subtiliter reticulati differt.

Perennial, simple or sparsely branched herbs, 50-70 cm high. Stems terete, hispiduous, mostly leafy below, arising from slender ligneous rootstocks. Leaves 5-7, largely clustered along the lower 1/5 of the stem, opposite at first but soon alternate, mostly 6-13 cm long, 1.2-2.5 cm wide; blades linear-elliptic to oblanceolate, tapered to the base or markedly clasping, coarsely and conspicuously hispid above with erect hairs, less so beneath, the hairs mostly along the major veins

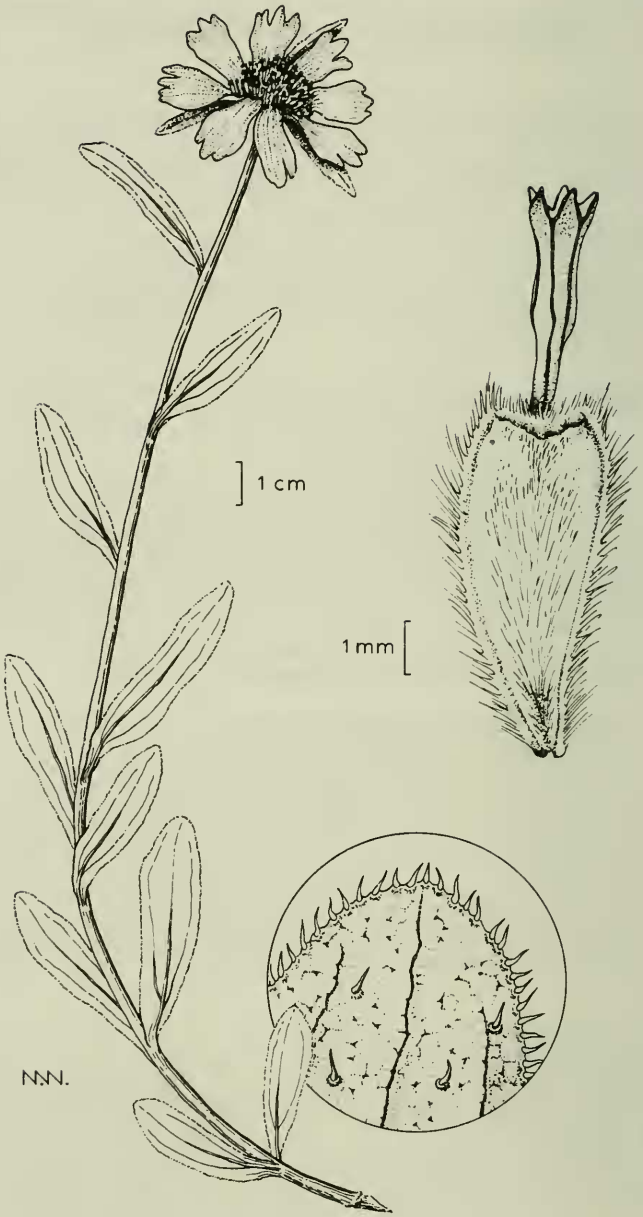

Fig. 1. Helianthella durangensis, from holotype.

of the markedly reticulate-pinnate venation, the margins serrulate. Heads radiate, borne 2-3 on a rather elongate common peduncle, the ultimate peduncles 10-15 cm long (ignoring the few bracts or reduced leaves). Involucres hemispheric, 3-seriate, the bracts blackish, subequal, spatulate, coarsely hispid, closely appressed, with mostly erose scarious margins. Ray florets 11, neuter, the ligules yellow, 12-15 mm long. Disk florets 30-40, the corollas yellowish-brown, ca 5 mm long. Achenes (immature) with narrow wings, glabrous, epappose.

TYPE: MEXICO.DURANGO: 23 mi NE of Durango-Sinaloa state line, open pine woodland, 8 Sep 1965, R.C. Jackson 7200 [the original label read 7201, but this has been hand-marked to read 7200] (holotype TEX).

Additional collection examined: DURANGO.Mcpio. de El Salto: 3.2 mi E of La Ciudad along highway 40 (ca 105°40'W, 23°44'N), 2600 m; "uncommon...on a slope under pines," 19 Aug 1988, A.C. Sanders 8134 (UCR).

The holotype has been held for some years now as close to, but different from, V. callilepis, a species of the upper headwaters of the Rio Mayo in Chihuahua. The latter differs quite markedly in its broadly elliptical mostly opposite leaves which are not confined to the lower portions of the stem.

It is a pleasure to name this poorly known taxon for Dr. R.C. Jackson who, to my knowledge, first collected it in 1965, this in spite of the fact that numerous collectors have worked the area, including the present author who has collected in the area of the type locality several times. As noted, the only other collection has been that of Sanders, who collected it 23 years thereafter.

Raymond C. Jackson is currently Professor of Biology at Texas Tech University, Lubbock, Texas. He has made numerous collections over much of Mexico and is perhaps best known for his cytogenetical and systematic work on the genus Machaeranthera.

SABAZIA ELATA (Canne) B. Turner, comb. nov.

based upon Galinsoga elata Canne, Rhodora 79:340.1977.

Canne (1977) positioned this taxon in the sect. Elata of the genus Galinsoga, a group which I feel belongs to Sabazia, or at least closer to Sabazia than to Galinsoga as classically defined.

SABAZIA GLANDULOSA (Canne) B. Turner, comb. nov.

based upon Galinsoga glandulosa Canne, Rhodora 79:380.1977.

Canne (1977) positioned this species in the sect. Galinsoga of Galinsoga with the notation that its relationship was "obscure" among the taxa of this group. I relate the species to the sect. Tricarpha of Sabazia which Longpre (1970) treated as a distinct genus.

LITERATURE CITED

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Longpre, E.K. 1970. The systematics of the genera Sabazia, Selloa and Tricarpha (Compositae). Publ. Mus. Michigan State Univ., Biol. Ser. 4:287-383.